

The invention having been described, I claim

1 1. A die insert for use in die insert confining grooves in slips for use in pipe string  
2 handling apparatus, the die insert comprising.

3 a) said die insert blank having a front face with pipe gripping teeth and a generally  
4 parallel back face;

5 b) textured relief formed on the surface of the back face, for forming and engaging  
6 impressions in the opposing surface of the confining slip, when forced against the  
7 opposing surface, to add skid resistance between the die insert and the opposing  
8 surface.

1 2. The die insert according to claim 1 wherein said textured relief comprises a  
2 plurality of generally transverse relief patterns, the relief representing surface depressions  
3 of more than one one-thousandths inch.

1 3. The die insert according to claim 1 wherein said texture relief is achieved by a  
2 plurality of generally transverse scribe lines.

1 4. The die insert according to claim 1 wherein said texture relief is achieved by  
2 acid etching of the surface.

1           5. A die insert for use in pipe string handling apparatus, having generally parallel first  
2 and second faces on opposite sides, said die insert comprising:

3           a) said die insert with a first of the faces textured with projecting teeth for gripping  
4 pipe surfaces; and

5           b) the second face textured with surface depressions to reduce the surface area in  
6 contact with a mating surface of die insert carrying slips such that more than a  
7 selected normal loading of the die insert will coin an impression of the textured  
8 surface of the die insert into the mating surface of the related die insert carrying  
9 groove, for the purpose of reducing the tendency of the die insert to slide in the  
10 groove when the die insert is carrying a substantial payload.

1           6. The die insert according to claim 5 wherein said textured surface depressions are  
2 more than one one-thousandths of an inch deep.

1           7. The die insert according to claim 5 wherein said textured surface depressions  
2 comprise a plurality of generally transverse relief patterns, the relief representing a surface  
3 depression of more than one thousandths inch.

1           8. The die insert according to claim 5 wherein said textured surface depressions are  
2 achieved by a plurality of generally transverse scribe lines.

1           9. The die insert according to claim 5 wherein said textured surface depressions are  
2 achieved by acid etching of the insert.

1           10. The die insert according to claim 5 wherein said textured surface on said second  
2 face comprises a pattern of a definable image.

1 11. The die insert according to claim 5 wherein said pictorial pattern is a logo  
2 having a definable pattern.

1 12. A die insert for use in pipe string handling apparatus, having generally  
2 parallel first and second faces on opposite sides, said die insert comprising:

3 a) said die insert with a first of the faces textured with projecting teeth for  
4 gripping pipe surfaces; and

5 b) the second face textured with surface depressions created to displace metal  
6 upward in the vicinity of the depression to present a small elevated surface  
7 accumulation of such limited effective collective load bearing area that the  
8 raised metal will be imbedded into the surface of the insert supporting  
9 surface, when subjected to a preselected amount of force perpendicular to  
10 said second face, to reduce the tendency for the insert to slide on the insert  
11 supporting surface.

1 13. The die insert according to claim 12 wherein said textured surface  
2 depressions are more than one one-thousandths of an inch deep.

1 14. The die insert according to claim 12 wherein said textured surface  
2 depressions comprise a plurality of generally transverse relief patterns, the relief  
3 representing a surface depression of more than one thousandths inch.

1 15. The die insert according to claim 12 wherein said textured surface  
2 depressions are achieved by a plurality of generally transverse scribe lines.

1 16. The die insert according to claim 12 wherein said textured surface  
2 depressions are achieved by acid etching of the insert.

1           17. The die insert according to claim 12 wherein said textured surface on said  
2 second face comprises a pictorial pattern.

1           18. The die insert according to claim 12 wherein said pictorial pattern is a  
2 symbol having a definable pattern.